

IN THE CLAIMS

1.-9. (Canceled)

10. (New) A capstan winch comprising at least two drums arranged opposite one another for pulling a load through a cable wound a predetermined number of times on said drums; wherein each of said drums comprises a peripheral wall and is equipped with a predetermined number of peripheral rings made of elastic material and independent of each other, said peripheral rings strung around said peripheral wall; wherein each of said peripheral rings comprises a peripheral throat to receive said cable and a lower wall in contact with said peripheral wall; and wherein said elastic material constituting said peripheral rings possesses physico-chemical characteristics to simultaneously permit both said cable to be driven and a relative sliding movement between said lower wall of said peripheral rings and said peripheral wall, said relative sliding movement being of an amplitude substantially equal to the longitudinal deformations of said cable, when said cable is subjected to tensions of variable amplitudes.
11. (New) The capstan winch of claim 1, wherein each of said drums is equipped with a pair of lateral rings, wherein at least one lateral ring in each pair is removable, thereby permitting said peripheral rings to be removed or positioned around said peripheral wall.
12. (New) The capstan winch of claim 1, wherein said peripheral rings are made of a synthetic material.
13. (New) The capstan winch of claim 1, wherein said peripheral walls are made of stainless steel or ceramic coated steel.
14. (New) The capstan winch of claim 1, wherein each of said drums revolves about an axis of rotation; wherein the distance between said throats of two

adjacent peripheral rings of a drum is defined by a pitch (p) and said drums are spaced apart axially from each other by a fraction of said pitch (p).

15. (New) The capstan winch of claim 14, wherein said fraction is equal to one half-pitch ($p/2$).
16. (New) The capstan winch of claim 1, wherein each of said drums turns on an axis of rotation and said axes of rotation form an angle (α) greater than zero therebetween.
17. (New) The capstan winch of claim 16, wherein said angle (α) is between 0.5° and 3° .
18. (New) The capstan winch of claim 1 for use in petroleum exploration in deep waters.